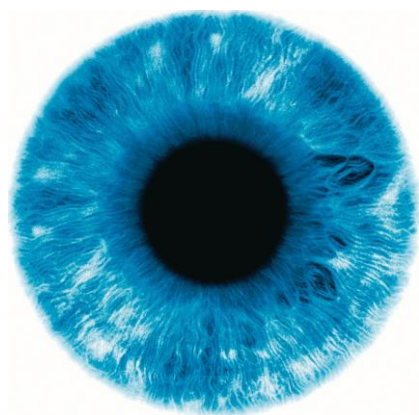


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Supporting Literature Searching

**Searching Healthcare
Databases
NHS ATHENS:**

www.evidence.nhs.uk



August 2015 – Version 5

Supporting Literature Searching

Searching Healthcare Databases

NHS ATHENS:

www.evidence.nhs.uk

Contents:

1.	Introduction.....	3
1.1	The Healthcare Databases.....	4
2.	Searching.....	5
2.1	Getting Started.....	5
2.2	Keywords or Thesaurus Searching?.....	6
2.2.1	Planning your Search.....	6
2.3	Searching with Keywords.....	7
2.4	Dealing with your Results.....	11
2.5	Searching using the Thesaurus.....	14
2.6	Limits – how to narrow down your search.....	17
2.7	Being Thorough.....	18
3	Saving Searches.....	19
4	Creating Alerts.....	20
5	Author and Journal Searching.....	21
6	Search Tips – Recap.....	22
7	Troubleshooting.....	23
7.1	Too many irrelevant articles.....	23
7.2	Not enough useful articles.....	23
8	Clipboard and De-duplication.....	24
8.1	Clipboard.....	24
8.2	Removing duplicates.....	25
9.	Help & Training.....	27

To help you use this guide:



indicates a step in the process of searching and retrieving articles.



indicates a tip, or an extra piece of information.

August 2015 – Version 5

This guide was produced by Deborah Lepley, Andy Parrett & Pauline Hockley on behalf of
EEHIST: East of England Healthcare Information Skills Trainers

1. Introduction

You will need an **NHS Athens Username and Password** to use the eight databases that make up this resource¹. You can self-register for an NHS Athens account at www.evidence.nhs.uk (click “Journals & Databases” and “register for ATHENS”)

When to use these resources

Search the healthcare databases to:

- find specific information on a topic or combination of topics
- answer a clinical query
- undertake a literature search
- find work by a particular author
- search or browse a particular journal

The databases (listed overleaf) contain references, often with summaries or abstracts, of articles that have been published in journals. Information may also be included from guidelines, dissertations, and book chapters.

Where a **full text** copy of an article is available a link will be displayed from the reference and you will be able to download the article **free of charge**.

If a full text copy of an article is not available electronically, it may be available in your local NHS Library. If it isn't, your local NHS library should be able to obtain a copy for you via their inter-library loan service.

Your search topic will determine how to search and which databases to use. You may find that just a basic search across a variety of databases will give you good enough results for your needs. However, for most healthcare topics and for a search to support evidence based practice, you will need to do an Advanced Search. **It is advisable that you search in more than one database and that you search each database individually.**

¹ Without an NHS Athens account, you can search PubMed and Biomed Central databases, but you will not access full text articles.

1.1 The Healthcare databases:

Allied and Complementary Medicine (AMED) 1985 -

This covers occupational therapy, physiotherapy, rehabilitation, plus alternative medicine: acupuncture, chiropractic, homeopathy, yoga, hypnosis, etc. It includes over 400 British and European journals.

British Nursing Index (BNI) 1992 -

This UK focused database contains articles from over 250 key English language nursing and midwifery journals.

Cumulative Index of Nursing & Allied Health (CINAHL) 1981 -

A US database covering all aspects of nursing and allied health. It contains materials from over 1,200 journals, theses and pamphlets.

EMBASE 1974 -

With particular emphasis on European sources, this database covers the whole field of medicine. Drugs, pharmacology and substance abuse are particularly well covered using 5,000 journals, about 1,500 not used in Medline.

Health Business Elite 1992 -

This database covers journals detailing all aspects of health care administration and other non-clinical aspects of health care institution management.

HMIC 1979 –

This comprises the Department of Health and Kings Fund databases. Both cover UK NHS health services management, policy and standards and social care and include details of reports as well as journal articles.

MEDLINE 1946 -

This is a large US database of medical information. Other subjects covered include dentistry, veterinary medicine, medical psychology, genetics and advanced nursing practice. The database covers over 5,000 journals from 70 countries.

PsycINFO 1806 -

Subjects covered relate to clinical, social and biological areas of psychology. Published by the American Psychological Association, material is included from 2,000 international periodicals.

2. Searching

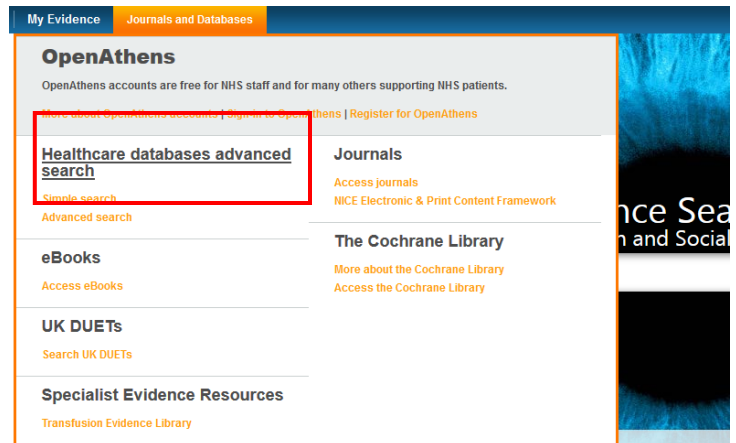
2.1 Getting Started



Go to: www.evidence.nhs.uk

Click the “Journals & Databases”

Click “Healthcare Databases Advanced Search”



Enter your NHS Athens username and password in the LOG IN box

You will then be taken to the Healthcare databases Advanced Search and the list of databases.

You can select more than one database to search, however to get best results and make the most of databases individual functions it is advisable to select and search one at a time.

Select (tick) a database and click “Search”.



You can also click on the name of the database

2.2 Searching –Keywords or Thesaurus Searching?

Most databases allow you to perform a keyword or thesaurus search, or even a mixture of the two. If you are new to searching, try a keyword search first on your topic.



A Keyword search (sometimes also called "Textword") will search for the word(s) you type in the article's title or abstract. It only finds the exact words you use, so you need to think carefully about your search words.



A thesaurus search will find your topic's correct thesaurus term or descriptor, and will ensure your results are *about* the subject you have chosen, not just mentioned. Thesaurus searching is covered in Section 2.5 on Page 14.

2.2.1 Planning your search

Before you begin your search it is a good idea to think about your search question and the keywords you plan to use.

To perform a Keyword search on the following topic:

Is the flu vaccine effective in reducing sick leave for healthcare staff?

First, break down your search question into its main concepts or topics. For example, for this search question we will search for:

- Healthcare staff
- Flu vaccine
- Reduced sick leave

For each of these topics make a list of synonyms, US variations in terminology or spelling, plurals and any other variations you can think of.

E.g.:

Healthcare staff/ healthcare worker(s)/ healthcare professional(s) / healthcare personnel

Flu / influenza / vaccine(s) / vaccination(s) / immunisation(s) / immunization(s)

Sick leave / time off work / absent / absentee / absenteeism



Phrase Searching:

If you want to search for a distinct phrase put it in quotation marks e.g. "healthcare worker". This will instruct the database to find only those words next to each other in that order. Otherwise the search will be e.g. healthcare AND worker

Truncation



By adding a * at the end of the word ensures the database also finds plurals and variations in word ending. For example, worker* will find both worker and workers.

2.3 Searching with Keywords



Enter your first keyword "healthcare staff" in the text box and click "Search". The default search is "Title and abstract". You can change this to "any field" if you want a broader search.

Search history				
<input type="checkbox"/> Select All <input type="checkbox"/> Save all <input type="checkbox"/> Save selected lines <input checked="" type="checkbox"/> Delete selected <input checked="" type="checkbox"/> Remove duplicates ? Collapse view ▲				
Line No.	Database	Search Term	View Results	
1	MEDLINE	"healthcare staff".ab	488	<input checked="" type="checkbox"/> Apply Limits <input checked="" type="checkbox"/>
Combine selected <input checked="" type="radio"/> AND <input type="radio"/> OR To combine two line numbers using NOT, enter the line numbers in the search box below: for example 1 NOT 2				



Your search and results are now displayed in the Search History:



Now type your next alternative term: "healthcare worker*" (adding the * to find workers as well) and click "Search".

Your results will be displayed in the Search History (No. 2):

Search history

☐ Select All

Line No.	Database	Search Term	View Results
<input type="checkbox"/> 1	MEDLINE	"healthcare staff".ti,ab	486 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>
<input type="checkbox"/> 2	MEDLINE	"healthcare worker*".ti,ab	3687 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>

☒ AND
 ☐ OR
 To combine two line numbers using NOT, enter the line numbers in the search box below: for example 1 NOT 2.

Look at the different number of results for the different keywords!

Search in this way for any other alternative terms for this topic: "healthcare personnel", "healthcare professional*", etc.

Your search screen will look like this:

Search history

☐ Select All

Line No.	Database	Search Term	View Results
<input type="checkbox"/> 1	MEDLINE	"healthcare staff".ti,ab	486 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>
<input type="checkbox"/> 2	MEDLINE	"healthcare worker*".ti,ab	3687 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>
<input type="checkbox"/> 3	MEDLINE	"healthcare personnel".ti,ab	548 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>
<input type="checkbox"/> 4	MEDLINE	"healthcare professional*".ti,ab	6285 <input type="button" value="Apply Limits"/> <input type="button" value="x"/>

☒ AND
 ☐ OR
 To combine two line numbers using NOT, enter the line numbers in the search box below: for example 1 NOT 2.

So far, all your searches are separate. We now need to connect them using **Boolean Operators**.



Boolean Operators

These are words used by databases and search engines to combine your subjects together.

OR will search for ANY of the subjects you choose within an article. Use OR to combine synonyms, alternative spellings or related terms.

AND will search for articles that contain ALL the subjects together.



To find results discussing any of these topics, click in the boxes next to the results, select: "OR" from underneath the search history, and click "[Combine Selected](#)".

Search history

☐ Select All ?

	Line No.	Database	Search Term	View Results
<input checked="" type="checkbox"/>	1	MEDLINE	"healthcare staff".ti,ab	456 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input checked="" type="checkbox"/>	2	MEDLINE	"healthcare worker*".ti,ab	3687 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input checked="" type="checkbox"/>	3	MEDLINE	"healthcare personnel".ti,ab	548 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input checked="" type="checkbox"/>	4	MEDLINE	"healthcare professional".ti,ab	6265 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>

☐ AND ☒ OR To combine two line numbers using NOT, enter the line numbers in the search box below: for example 1 NOT 2

The results are references containing any of your keywords.

Search history

☐ Select All ?

	Line No.	Database	Search Term	View Results
<input type="checkbox"/>	1	MEDLINE	"healthcare staff".ti,ab	456 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	2	MEDLINE	"healthcare worker*".ti,ab	3687 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	3	MEDLINE	"healthcare personnel".ti,ab	548 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	4	MEDLINE	"healthcare professional".ti,ab	6265 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	5	MEDLINE	1 OR 2 OR 3 OR 4	10733 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>

Search No. 5 now contains articles that mention either healthcare staff, OR workers, OR personnel OR professionals



Now follow the same procedure for each of your other keywords.

E.g. Search for influenza vaccine and its alternative terms, and then sick leave and its alternative terms. Your screen will now look something like this:

Search history

☐ Select All ?

	Line No.	Database	Search Term	View Results
<input type="checkbox"/>	7	MEDLINE	"influenza vaccin*".ti,ab	8918 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	8	MEDLINE	"influenza immunisation*".ti,ab	101 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	9	MEDLINE	"influenza immunization*".ti,ab	782 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	10	MEDLINE	6 OR 7 OR 8 OR 9	9057 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	11	MEDLINE	"sick leave".ti,ab	2803 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	12	MEDLINE	"time off work".ti,ab	547 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	13	MEDLINE	absent*.ti,ab	106205 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>
<input type="checkbox"/>	14	MEDLINE	11 OR 12 OR 13	111299 <input type="button" value="Apply Limits"/> <input type="button" value="✕"/>

You will need to scroll up and down to see your full search history

Now to find articles containing all three subjects together we combine them using Boolean operator AND.



Select (tick) each combined search result (E.g. search 5, 10 and 14 in the screenshot). Select "AND" and click "[Combine Selected](#)"

Search history						
<input type="checkbox"/> Select All	<input type="checkbox"/> Save all	<input type="checkbox"/> Save selected lines	<input type="checkbox"/> Delete selected	<input type="checkbox"/> Remove duplicates	?	<input type="button" value="Collapse view ▲"/>
Line No.	Database	Search Term	View Results			
<input type="checkbox"/> 7	MEDLINE	"influenza vaccin".f,ab	9910	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input type="checkbox"/> 8	MEDLINE	"influenza immunisation".f,ab	101	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input type="checkbox"/> 9	MEDLINE	"influenza immunization".f,ab	752	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input checked="" type="checkbox"/> 10	MEDLINE	6 OR 7 OR 8 OR 9	9957	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input type="checkbox"/> 11	MEDLINE	"sick leave".f,ab	2903	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input type="checkbox"/> 12	MEDLINE	"time off work".f,ab	547	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input type="checkbox"/> 13	MEDLINE	absent".f,ab	108265	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	
<input checked="" type="checkbox"/> 14	MEDLINE	11 OR 12 OR 13	111299	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>	

Your final search result now contains articles mentioning all 3 subjects together.

<input type="checkbox"/> 14	MEDLINE	11 OR 12 OR 13	111299	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>
<input checked="" type="checkbox"/> 15	MEDLINE	5 AND 10 AND 14	13	<input type="button" value="Apply Limits"/>	<input type="button" value="x"/>

What to do next:

- ❑ View your search results: go to Section 2.4 "Dealing with your Results" on page 11.
- ❑ Narrow down the number of results: go to Section 2.6 "Limits – how to narrow down your search" on page 17.

2.4 Dealing with your results

Click on the number of results to display a list of references on your topic(s).



Display Abstracts Sort by: Unsorted Page: 1 2 Items per page: 10

1. A retrospective survey of the safety of trivalent influenza vaccine among adults working in healthcare settings in south metropolitan Perth, Western Australia, in 2010.
Author(s) McEvoy SP
Citation: Vaccine, April 2012, vol./iss. 30/17(2801-4), 0264-410X;1873-2518 (2012 Apr 5)
Publication Date: April 2012
Medline

2. Effectiveness of seasonal influenza vaccination in healthcare workers: a systematic review.
Ng AN, Lai CK
Journal of Hospital Infection, December 2011, vol./iss. 79/4(279-86), 0195-6701;1532-2939 (2011 Dec)
Publication Date: December 2011
Medline
in fulltext at Elsevier

3. Options and influence of a hospital influenza vaccination policy.
Daugherty EL, Speck KA, Rand CS, Perl TM
Infection Control & Hospital Epidemiology, May 2011, vol./iss. 32/5(449-55), 0899-023X;1559-6834 (2011 May)
Publication Date: May 2011
Medline

Click on a title to view an ABSTRACT if there is one. Click "Display Abstracts" to see abstracts for all your results

You can sort by Publication Date, & change the number of items displayed on the page



Click on the title of a reference to see an abstract (if there is one). To return to the list of results click "Search Results" at the top of the screen.

Home » Database select » Search and Limits » Search Results » Result Detail

Result Detail

Previous Next

2. Title: Effectiveness of seasonal influenza vaccination in healthcare workers: a systematic review.
Citation: Journal of Hospital Infection, 12 2011, vol./iss. 79/4(279-86), 0195-6701;1532-2939 (2011 Dec)
Author(s): Ng AN,Lai CK

Abstract: Vaccination is considered a key measure to protect vulnerable groups against influenza infection. The objectives of this review are to determine the effect of influenza vaccinations in reducing laboratory-confirmed influenza infections, influenza-like illnesses (ILIs), working days lost among vaccinated HCWs, and associated adverse effects after vaccination. Twenty-two healthcare-related databases and internet resources, as well as reference lists, and the bibliographies of all of the retrieved articles were examined. All randomized controlled trials (RCTs) comparing the effectiveness of any kind of influenza vaccine among all groups of HCWs with a placebo/vaccine other than the influenza vaccine/no intervention were included in the review. Only three RCTs matched the inclusion criteria. There is a limited amount of evidence suggesting that receiving influenza vaccination reduces laboratory-confirmed influenza infections in HCWs. No evidence can be found of influenza vaccinations significantly reducing the incidence of influenza, number of ILI episodes, days with ILI symptoms, or amount of sick leave taken among vaccinated HCWs. There is insufficient data to assess the adverse effects after vaccination. There is no definitive conclusion on the effectiveness of influenza vaccinations in HCWs because of the limited number of related trials. Further research is necessary to evaluate whether annual vaccination is a key measure to protect HCWs against influenza infection and thus increase their confidence in the vaccine. In the mean time, the direction of promoting influenza vaccination to HCWs can be shifted from staff protection to patient protection, with accurate information to address concerns and misconceptions. Copyright Copyright 2011 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

Language: English

Publication type: Journal Article,Meta-Analysis,Review



Some articles may be available as full text straight away from an e-journal supplier (e.g. BMJ Publishing, Proquest, Elsevier ScienceDirect, etc.). If this is the case, there will be blue links to the e-journal supplier at the bottom of the reference.

In some cases there will be more than one full text link. Click on a link to go to the article.

☐ **10. Influenza immunisation: attitudes and beliefs of UK healthcare workers.**
Author(s) Smedley J, Poole J, Wacławski E, Stevens A, Harrison J, Watson J, Hayward A, Coggon D
Citation: Occupational & Environmental Medicine, April 2007, vol./is. 64/4(223-7), 1351-0711;1470-7926 (2007 Apr)
Publication Date: April 2007
Source: Medline
Available in fulltext at [Highwire Press](#)
Available in fulltext at [National Library of Medicine](#)

Sometimes a PDF of the article will load automatically, or you may need to select a PDF link.

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home 

Searching all content for Year: 2007 Vol: 64 Page: 223

ORIGINAL ARTICLES:
Julia Smedley, Jason Poole, Eugene Wacławski, Anthony Stevens, John Harrison, John Watson, Andrew Hayward, David Coggon
Influenza immunisation: attitudes and beliefs of UK healthcare workers
Occup. Environ. Med., Apr 2007; 64: 223 - 227. [Journal Home](#) [Abstract](#) [Full Text](#)
[PDF](#) [Request Permissions](#)

Free sample
This recent issue is free to all users to allow everyone the opportunity to see the full scope and typical content of OEM.
[View free sample issue >>](#)

Don't forget to [sign up for content alerts](#) so you keep up to date with all the articles as they are published.



On some occasions, clicking the blue full text link may not take you directly to the article, and you may be presented with a log-in screen. As you have already logged in with Athens you do not need to login again!

Look around the screen for a "Login with Athens" link and click it. This may be quite small, and for some journals located at the top right of the screen. This should then allow you access.



There are over 2000 free online journals available full text, which have been purchased for you by NHS England or your local NHS Library service. Your NHS Athens username and password gives you direct access to these journals via the database links or by clicking the "Find a Journal" link on EEL (<http://www.eel.nhs.uk>)

Some items in your list may say they are available from a local NHS Library.



If there is no full text link, or local availability please contact your local NHS library for help in obtaining the article.







To select references for printing, saving or emailing, click in the box to the left of a reference to "tick" it. Move through the pages of results using the arrow (or page numbers) at the bottom of the page.

<input checked="" type="checkbox"/>	8. [Summary of the practice guideline 'Influenza and influenza vaccination' (first revision) from the Dutch College of General Practitioners]. [Dutch] Samenvatting van de standaard 'Influenza en influenzavaccinatie' (eerste herziening) van het Nederlands Huisartsen Genootschap. Author(s) Opstelten W, van Essen GA, van der Laan JR, Geijer RM, Goudswaard AN Citation: Nederlands Tijdschrift voor Geneeskunde, September 2008, vol./is. 152/39(2116-9), 0028-2162;0028-2162 (2008 Sep 27) Publication Date: September 2008 Source: Medline
<input checked="" type="checkbox"/>	9. The evaluation of free influenza vaccination in health care workers in a medical center in Taiwan. Author(s) Chan AL, Shie HJ, Lee YJ, Lin SJ Citation: Pharmacy World & Science, January 2008, vol./is. 30/1(39-43), 0928-1231;0928-1231 (2008 Jan) Publication Date: January 2008 Source: Medline
<input type="checkbox"/>	10. Influenza immunisation: attitudes and beliefs of UK healthcare workers. Author(s) Smedley J, Poole J, Wacławski E, Stevens A, Harrison J, Watson J, Hayward A, Coggon D Citation: Occupational & Environmental Medicine, April 2007, vol./is. 64/4(223-7), 1351-0711;1470-7926 (2007 Apr)

- Once you have selected references, you can manage your search results using the panel provided at the bottom of each results page.

Page: 1 2

Results Selected 2 unique items selected <input type="radio"/> Select all on this page <input type="radio"/> Select all results <input type="radio"/> Deselect all	Output Format: <input checked="" type="radio"/> MS Word <input type="radio"/> PDF <input type="radio"/> HTML <input type="radio"/> Text <input type="radio"/> XML <input type="radio"/> RIS (inc RefMan, ProCite, EndNote and RefWorks)	Display Format: ? <input checked="" type="radio"/> Short <input type="radio"/> Medium <input type="radio"/> Full <input checked="" type="checkbox"/> Include Search History	Actions: Display, save or email results with selected fields and output formats. <div> Email results</div> <div> Export results</div> <div> Copy to clipboard</div> <div> View clipboard</div>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- Your chosen results will be displayed as Short, Medium or Full format (Medium will include the abstract if there is one and Full includes thesaurus subjects – Section 2.5). Generally, you can leave the Output Format as HTML, unless you particularly want to output in Word, PDF, plain text or XML formats. However, choose RIS to export your results to Reference Manager, ProCite, EndNote or RefWorks.
- The Actions column allows you to display and save results by clicking 'Export Results'. You also have the option to 'Email Results' to an address of your choosing.
- You also have the option of temporarily saving your selected results to a Clipboard. This keeps your results for the duration of your search session. For more information on the Clipboard feature see section 8.1 of this guide.

2.5 Searching - Using the Thesaurus

A keyword search, whilst useful, does not always retrieve the most focused results. You may find you retrieve articles that mention your topics, but your topics are not the subject of the article. You may miss important articles on your topic because you are relying on guessing the words used by the author!

To get better results, the **thesaurus mapping** feature is recommended. This enables you to map your search term to the indexed vocabulary for the particular database you are searching. This means you should retrieve articles that are *about* your topic, and will also incorporate synonyms, and plurals without you typing them.

We will now try our healthcare staff, flu vaccine and sick leave search again using the thesaurus.



Enter your first search term (e.g. "influenza vaccine") and tick the 'Map to Thesaurus' box. Click 'search'.

The screenshot shows a search interface with a text input field containing "influenza vaccine". To the right of the input field is the label "IN". Below the input field is a checkbox labeled "Map to Thesaurus" which is checked and highlighted with a red rectangle. To the right of the "Map to Thesaurus" checkbox is a question mark icon. Further right is a section with several checkboxes: "Title and Abstract" (checked), "Any field", "Publication Type", "Title", "Journal Name *", "Abstract", "Author *", and "ISSN". Below this section is a note: "* For Author and Journal name enter search terms in 'quotation marks'". To the right of the note is another question mark icon. At the bottom right is a blue button labeled "Search". In the top right corner, there is a link that says "browse thesaurus".

Terms that match the concepts of your keyword search will then be displayed. You may find you have an exact match for your keyword (as in Influenza Vaccines), or you may have a choice of terms.

You can click to select one or more subjects at this point and click search to continue or choose any of the other options: “Explode” “Major

Descriptor” or “Subheadings”. Each of these features are described below. You can also view the "Scope" which in most cases will give you a definition of the subject.



Subheadings: It is possible to break down some thesaurus terms into *subheadings*. These enable you to focus your search even further. To view the **Subheadings** attached to a thesaurus term, click on the tick in the subheadings column. A list of subheadings will appear. You can select as many as you wish from the list, or none at all if you want to incorporate all aspects of the subject in your search.



Major Descriptor: You can select **Major** if you wish your search to retrieve only articles where the subject matter is predominantly that of your chosen thesaurus term.

You can select more than one thesaurus term – this is the result of mapping “sick leave”. Both “Sick Leave” and “Absenteeism” are relevant to the search and have been selected. Make sure “OR” is selected at the top of the screen!

Currently selected: Sick Leave, Absenteeism

You are currently browsing Medicine

Thesaurus > Sick Leave

	Select ?	Explode ?	Major Descriptor ?	Subheadings ?
+ Sick Leave [Scope]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Absenteeism [Scope]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Insurance, Health [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Adult [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Salaries and Fringe Benefits [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Middle Aged [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Denmark [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Adolescent [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Aged [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Temporomandibular Joint Dysfunction Syndrome [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Time Factors [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Explode will expand your subject by searching for your term plus any related and narrower terms listed (indented) below. Click on your selected topic to view its place in the thesaurus “tree” where it appears next to closely related terms.

When you map “healthcare staff” to the thesaurus it maps to “Health Personnel”.

Click on “health personnel” to investigate the Explode feature.

You are currently browsing Medicine

Thesaurus

	Select ?	Explode ?	Major Descriptor ?	Subheadings ?
+ Health Personnel [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Great Britain [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Medical Staff [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Nursing Staff, Hospital [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ State Medicine [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Carrier State [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Cross Infection [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Attitude of Health Personnel [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Nursing Staff [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
+ Sexual Harassment [Scope]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You now see where Health Personnel appears in the database’s thesaurus.

Health Personnel is a “broader” term with “narrower” terms listed beneath it in bold (e.g. Allied Health Personnel, Anatomists, etc.)

If you choose “**Explode**” next to Health Personnel your search will include all these narrower terms. This is useful to our search as we are interested in the flu vaccine

You are currently browsing Medicine

Thesaurus > Named Groups (Non MeSH) > Persons > Occupational Groups > Health Personnel

	Select ?
- Health Personnel [Scope]	<input type="checkbox"/>
+ Allied Health Personnel [Scope]	<input type="checkbox"/>
Anatomists [Scope]	<input type="checkbox"/>
Caregivers [Scope]	<input type="checkbox"/>
Coroners and Medical Examiners [Scope]	<input type="checkbox"/>
+ Dental Staff [Scope]	<input type="checkbox"/>
+ Dentists [Scope]	<input type="checkbox"/>
Faculty, Dental [Scope]	<input type="checkbox"/>
Faculty, Medical [Scope]	<input type="checkbox"/>
Faculty, Nursing [Scope]	<input type="checkbox"/>
Health Educators [Scope]	<input type="checkbox"/>
+ Health Facility Administrators [Scope]	<input type="checkbox"/>
Infection Control Practitioners [Scope]	<input type="checkbox"/>
Medical Chaperones [Scope]	<input type="checkbox"/>
Medical Laboratory Personnel [Scope]	<input type="checkbox"/>
+ Medical Staff [Scope]	<input type="checkbox"/>
+ Nurses [Scope]	<input type="checkbox"/>
+ Nursing Staff [Scope]	<input type="checkbox"/>
+ Personnel, Hospital [Scope]	<input type="checkbox"/>
Pharmacists [Scope]	<input type="checkbox"/>

with any type of healthcare staff.

Repeat thesaurus mapping for each of your subjects. The thesaurus terms will be displayed in the Search History. You can then combine them as you did your keyword search, and view results.



<input type="checkbox"/> Select All	Save all	Save selected lines	Delete selected	Remove duplicates	?	Collapse view ▲
Line No.	Database	Search Term	View Results			
<input type="checkbox"/> 1	MEDLINE	INFLUENZA/VACCINES/	13918	▼ Apply Limits		
<input type="checkbox"/> 2	MEDLINE	SICK LEAVE/ OR ABSENTEEISM/	9407	▼ Apply Limits		
<input type="checkbox"/> 3	MEDLINE	exp HEALTH PERSONNEL/	338392	▼ Apply Limits		
<input type="checkbox"/> 4	MEDLINE	1 AND 2 AND 3	22	▼ Apply Limits		

Please note, not all the databases support thesaurus options.


It is worth noting that some databases will add an article, and then add thesaurus terms to that article at a later date. This could mean a thesaurus only search does not find recently added articles. Therefore, for a comprehensive search, a combination of keywords and thesaurus searching is recommended.

2.6 Limits- How to Narrow Down your Search

You may wish to "limit" the number of search results retrieved, either because you have found too many, or because you are only interested in articles that meet your pre-defined criterion (e.g. within a certain date range, English only, or to do with a certain age group, etc.)

Some of the databases have menus of "limits" you can select from.

You may apply as many limits to your search as you wish, but remember the more you choose the less results you will find!



To apply any relevant limits to your search results, Click "Apply Limits" next to your search result on the search history.

<input type="checkbox"/> Select All	Save all	Save selected lines	Delete selected	Remove duplicates	?	Collapse view ▲
Line No.	Database	Search Term	View Results			
<input type="checkbox"/> 1	MEDLINE	INFLUENZA/VACCINES/	13918	▼ Apply Limits		
<input type="checkbox"/> 2	MEDLINE	SICK LEAVE/ OR ABSENTEEISM/	9407	▼ Apply Limits		
<input type="checkbox"/> 3	MEDLINE	exp HEALTH PERSONNEL/	338392	▼ Apply Limits		
<input type="checkbox"/> 4	MEDLINE	1 AND 2 AND 3	22	▼ Apply Limits		

The Limits panel will open, where you can select the limits for your search. Use the tabs to move between menus and click Search when you have finished.

Search Limits

Clear all limits ?

Date Article Type Clinical Query Human or Animal Gender Age Groups **Language** Other

☒ English Language Languages

- ☐ Afrikaans
- ☐ Albanian
- ☐ Arabic
- ☐ Armenian
- ☐ Azerbaijani

There are **19** results based on your current criteria
(INFLUENZA VACCINES) AND (SICK LEAVE/ OR ABSENTEEISM/) AND (exp HEALTH PERSONNEL/) (Limit to: English Language)

Search Keyword:
Enter search words or line numbers in the box below. You may use AND, OR, NOT, * to search for word stems and round brackets () to group words. ?

☐ Map to Thesaurus ?

IN

- ☐ Title and Abstract
- ☐ Any field
- ☐ Author *
- ☐ ISSN
- ☐ Journal Name *
- ☐ Publication Type
- ☐ Title

* For Author and Journal name enter search terms in "quotation marks" ?

Browse Thesaurus

Search

2.7 Being thorough

If you wish to do a thorough literature search, and try to ensure you do not miss any relevant results, you can continue your search using a different database.



To do this, select another database from the drop-down menu as shown. You can then continue with a search in the new database.

Search history

☐ Select All ☒ Save all ☒ Save selected lines ☒ Delete

Line No.	Database	Search Term
1	EMBASE	asthma*.ti
2	EMBASE	(nebuliser* OR nebulizer*).ti
3	EMBASE	1 AND 2

Combine selected AND OR To combine two line numbers box below: for example 1 NO

You are currently searching EMBASE Search another ?

Search

There are 0 results based on your search

Search Keyword:
Enter search words or line numbers in the box below. You may use AND, OR, NOT, * to search for word stems and round brackets () to group words. ?

Search another

- AMED
- BNI
- CINAHL
- EMBASE
- Health Business Elite
- HMIC
- Medline
- PsycINFO

» Re-run

You also have the option to re-run your search – either all of it or selected lines. Select your new database as before, but this time either click “Re-run all line numbers” or “Re-run selected line numbers”. For this second option, you must first tick the searches from your search history you wish to re-run.



box below for example 1 AND 2

You are currently searching Medline ? Re-run all line numbers or Re-run selected line numbers

Re-running a search will only work if you have done a keyword search (section 2.3) and even then, look carefully at your results. If you have applied any limits to your search (section 2.6) they may not work in the new database you have chosen.

If you wish to repeat a thesaurus search, it is advisable to "continue" with a new database (rather than "Re-run") and do your search again using thesaurus mapping as in section 2.5

3. Saving Searches



To save your search so that you can run it again at a later date, either tick the searches you wish to save and click “Save Selected lines” or click “Save All” to save the entire search.

Search history

<input type="checkbox"/> Select All	<input type="checkbox"/> Save all	<input type="checkbox"/> Save selected lines	<input type="checkbox"/> Delete selected	<input type="checkbox"/> Remove duplicates	?	Collapse view ▲
Line No.	Database	Search Term	View Results			
<input type="checkbox"/> 1	MEDLINE	INFLUENZA VACCINES/	13916	▼ Apply Limits	⊕	
<input type="checkbox"/> 2	MEDLINE	SICK LEAVE/ OR ABSENTEEISM/	9407	▼ Apply Limits	⊕	
<input type="checkbox"/> 3	MEDLINE	exp HEALTH PERSONNEL/	338392	▼ Apply Limits	⊕	
<input type="checkbox"/> 4	MEDLINE	1 AND 2 AND 3	22	▼ Apply Limits	⊕	

On the following screen give your search a meaningful name and click ‘save’



Select Database | Saved Searches | Search | Recover Searches | Alerts | My Account

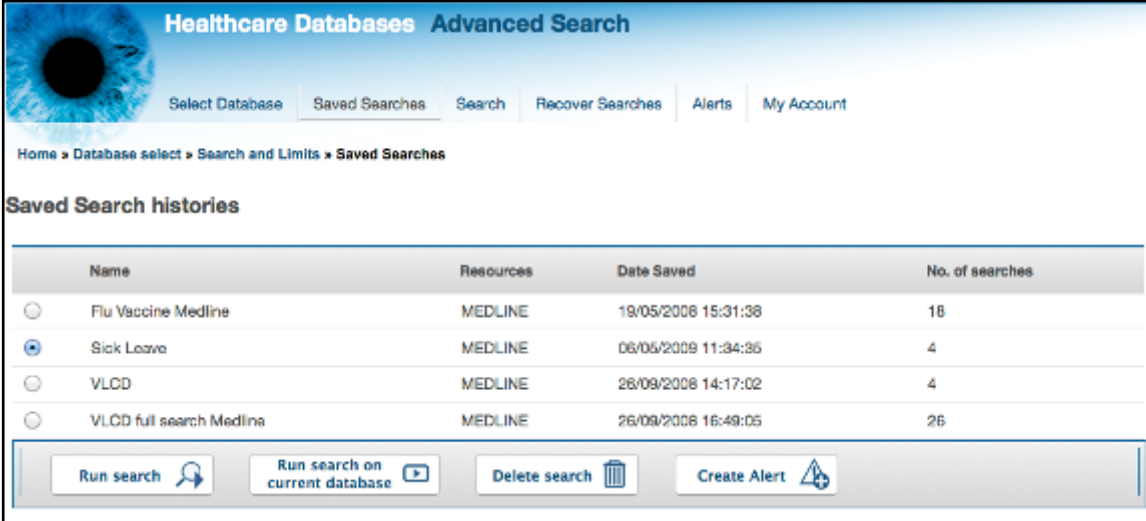
Home » Database select » Search results » Save Current Search

Save Current Search

Cancel Search Name: Save Save & Create Alert

Your current search history	Database
INFLUENZA VACCINES/	MEDLINE
SICK LEAVE/ OR ABSENTEEISM/	MEDLINE
exp HEALTH PERSONNEL/	MEDLINE
1 AND 2 AND 3	MEDLINE

To retrieve a saved search, click “Saved Searches” from the top of the search screen. Select the search you wish to run, and click either “Run Search” or “Run search on Current database”. This second option allows you to run the search in a different database to the one you originally saved it in.



The screenshot shows the 'Healthcare Databases Advanced Search' interface. At the top, there are navigation tabs: 'Select Database', 'Saved Searches' (active), 'Search', 'Recover Searches', 'Alerts', and 'My Account'. Below the tabs is a breadcrumb trail: 'Home » Database select » Search and Limits » Saved Searches'. The main section is titled 'Saved Search histories' and contains a table with the following data:

Name	Resources	Date Saved	No. of searches
<input type="radio"/> Flu Vaccine Medline	MEDLINE	19/05/2008 15:31:38	18
<input checked="" type="radio"/> Sick Leave	MEDLINE	06/05/2009 11:34:35	4
<input type="radio"/> VLCD	MEDLINE	26/09/2008 14:17:02	4
<input type="radio"/> VLCD full search Medline	MEDLINE	26/09/2008 16:49:05	26

Below the table are four buttons: 'Run search' (with a magnifying glass icon), 'Run search on current database' (with a play icon), 'Delete search' (with a trash can icon), and 'Create Alert' (with a bell icon).

You can also delete a search, and Create Alert (Section 4).

4. Creating Alerts

An Alert will automatically run your search each time the database is updated, and email you new results that match your search strategy.

To create an Alert, follow the same steps as described in Section 3, but when you save your search, click "Save & Create Alert" instead.



The screenshot shows the 'Save Current Search' dialog box. At the top, there are navigation tabs: 'Select Database', 'Saved Searches' (active), 'Search', 'Recover Searches', 'Alerts', and 'My Account'. Below the tabs is a breadcrumb trail: 'Home » Database select » Search results » Save Current Search'. The main section is titled 'Save Current Search' and contains a 'Cancel' button, a 'Search Name:' label, a text input field containing 'sick leave', a 'Save' button, and a 'Save & Create Alert' button.

On the following alert screen enter an email address that you would like your alert to be delivered to and chose a format type and frequency of delivery from the drop down menus. Then click “Save Alert”.

Create Alert

Alert Definition

Alert name: sick leave

Search name: sick leave

Email to address(es): deborah.lepley@meht.nhs.uk

Email reply-to address: deborah.lepley@meht.nhs.uk

Document type: Pdf

Frequency of Alert: Weekly

Detail type: Small

Include Search History: ☐

5. Author and Journal Searching

You can construct a search to retrieve articles by particular authors or those that have been published in particular journals.

Type the author's name in the following way:

- ☐ "kendrick k*" if you know a first initial (the * will pick up any other initials)
- ☐ "kendrick km" if you know all initials
- ☐ "kendrick*" if you do not know any of the authors initials.
- ☐ Make sure you use the quotation marks, and Remove the tick from "Title and Abstract" and tick "Author":

"kendrick k*" IN

☐ Title and Abstract ☐ Journal Name *

☐ Any field ☐ Abstract

☐ Publication Type ☒ Author *

☐ Title ☐ ISSN

[More fields](#)

☐ Map to Thesaurus * For Author and Journal name enter search terms in "quotation marks".

To search by **Journal**, select Journal name and key in the Journal title with quotation marks:

<input type="text" value="British Medical Journal"/>	IN	<input type="checkbox"/> Title and Abstract <input type="checkbox"/> Any field <input type="checkbox"/> Publication Type <input type="checkbox"/> Title	<input checked="" type="checkbox"/> Journal Name * <input type="checkbox"/> Abstract <input type="checkbox"/> Author * <input type="checkbox"/> ISSN
More fields			

You can combine any of these searches with a topic search if this would be appropriate for the information you wish to retrieve.

6. Search tips - Recap



Truncation / Wildcard - finds alternative word endings & plurals	Symbol
Normal wildcard/ Unlimited truncation: Can represent 0 or many characters	* e.g. pregnan*
Limited truncation: number (n) specifies the maximum characters after it	*n e.g. pregnan*2
Boolean Operators - combines results of searches	
Find results containing ALL words together	AND
Find Any one or more of these words	OR
Remove a keyword or subject from your search	NOT
Phrase Searching	
Words next to each other, in the same order	"keywords together"
Words within the specified number of words (n) of each other, in any order	ADJn e.g. ADJ2

7. Troubleshooting

Searching for literature can occasionally lead to unsatisfactory results. There are generally two types of problem that may be encountered:

- Too many irrelevant articles in the search result
- Too few relevant articles generated by the search.

Ideally when carrying out a literature search the results should find all of the articles which are relevant to the question, while excluding any article which is not relevant.

7.1 Too Many Irrelevant Articles

If the search results contain a large amount of irrelevant articles try:

- Using the thesaurus (Section 2.5) and using subheadings and major descriptor to focus your search.
- Using the NOT command to exclude a concept which is not wanted. Use only if results have a strong bias towards a topic that you do not want at all as you may remove some useful information.
- Searching for phrases using “ ”. Just ‘Mental Health’ without quotation marks “ ” would generate irrelevant hits because it would include results for the words *mental* and *health* in any order in the title or abstract.
- Think of more precise keywords that can be used/added to the search.
- Using the Limits, such as limit to geographical location, age group, or publication date
- Search by ‘Title’ rather than ‘Title and Abstract’ or ‘Any Field’
- Using the combine search option to fine tune your search.

7.2 Not Enough Useful Articles

If the search results do not contain enough useful articles try:

- Alternative spelling – Use the American and European spelling of a word. For example gynaecology or gynecology
- Different synonyms – try using alternative words or phrases to describe your search topic/concept. For example, try ‘bandage’ as an alternative to ‘dressing’ as a search terms.
- Using the Explode feature if you use thesaurus terms.
- Find more relevant thesaurus terms by looking at those given to articles you have found – have you missed any?
- Searching an alternative database. For example switch from Medline to EMBASE or CINAHL.

- Widening your search – your search may contain too many words and phrases. Try removing one of the search terms or limits.
- Using the OR command, For example 'wound care' OR 'wound management'
- Truncation – Use the * command to give suffix variations. For example, 'bandag*' will find bandage, bandages, and bandaging
- Using the search 'in any field' or 'in title and abstract' options.

Note: If you are searching for results in a new area of research there may be few published articles.

8 Clipboard and Removing Duplicates

8.1 Clipboard

During a search session you can save results temporarily to a clipboard. This enables you to keep individual results from different searches and then email, print or save.



Select articles from your results list by ticking, and then click Copy to Clipboard at the bottom of the screen.

The screenshot shows a list of three search results. Each result includes a checkbox, a title, authors, citation, publication date, and source. At the bottom of the results list, there is a 'Copy to clipboard' button, which is highlighted with a red rectangular box. Other buttons like 'Email results', 'Export results', and 'View clipboard' are also visible.

The message that appears tells you how many results you have added to the clipboard. If any of your selection were already on the clipboard, they are not added again. In this example, three new results were added and none of them were already on the clipboard:

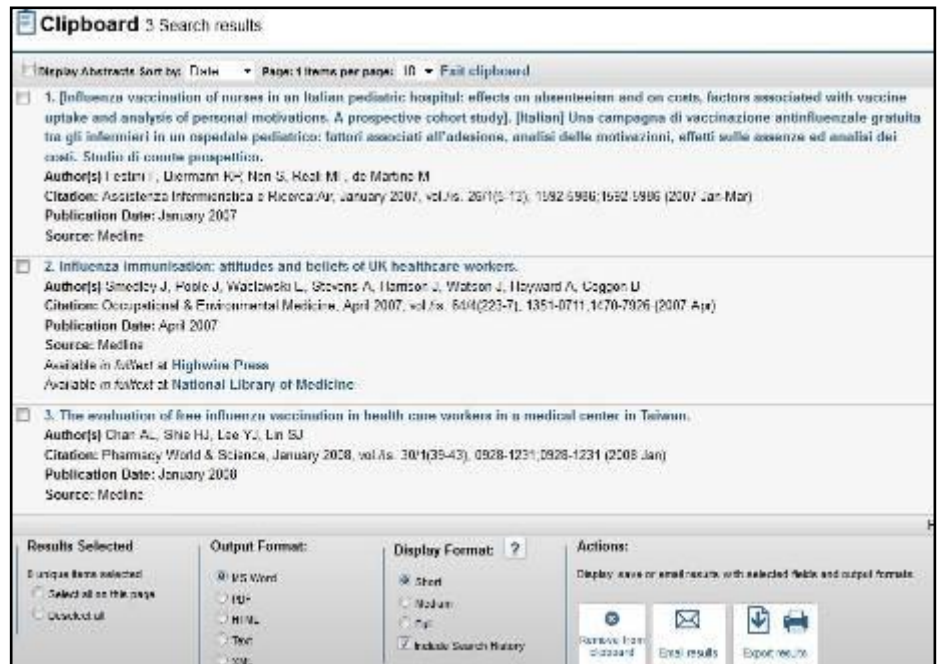
The screenshot shows a confirmation dialog box with the text '3 results added to clipboard' and an 'OK' button. The dialog box is centered over a blurred background of the search results.

When ready you can view your clipboard.

You can then go through your selected results, choose to output (i.e. email, print or save) all results saved on the clipboard or select individual results to output. When you are viewing the clipboard the information panel looks like this:



You can save a maximum of 500 results to the clipboard, but please note that it will be cleared at the end of your database searching session.



8.2 Removing Duplicates

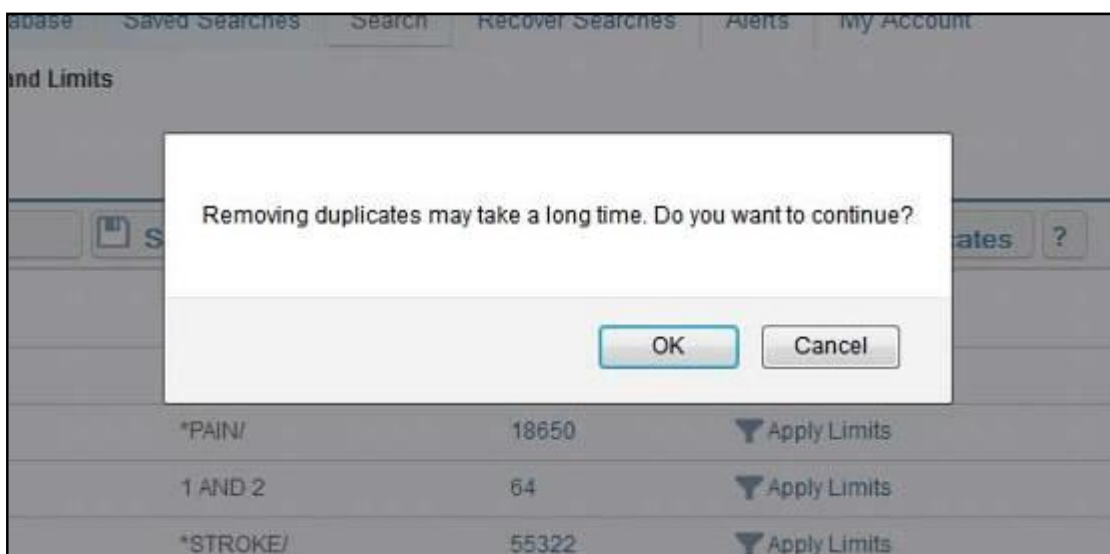
You are able to remove duplicate results from your searches when you have searched across multiple databases.



Tick the boxes next to the appropriate searches in your Search History, and click Remove Duplicates.

<input type="checkbox"/> Select All	Save all	Save selected lines	Delete selected	Remove duplicates	?
	Line No.	Database	Search Term	View Results	
<input type="checkbox"/>	1	CINAHL	*STROKE/	18913	Apply Limits
<input type="checkbox"/>	2	CINAHL	*PAIN/	18650	Apply Limits
<input checked="" type="checkbox"/>	3	CINAHL	1 AND 2	64	Apply Limits
<input type="checkbox"/>	4	EMBASE	*STROKE/	55322	Apply Limits
<input type="checkbox"/>	5	EMBASE	*PAIN/	66048	Apply Limits
<input checked="" type="checkbox"/>	6	EMBASE	4 AND 5	140	Apply Limits

A dialog box is displayed:



Click OK. A new row is added to your search history: you can choose to examine the original combined set, the unique records and the duplicates.

<input type="checkbox"/>	6	EMBASE	4 AND 5	140
<input type="checkbox"/>	7	CINAHL, EMBASE	Duplicate filtered: [1 AND 2], [4 AND 5]	204 194 Unique results 10 Duplicate results

You can only remove duplicates from results if the combined results of the searches you select totals less than 500.

9. Help and Training

Free training on how to search databases is available from any NHS Library in the East of England.

For further help or to arrange a training session in Addenbrooke's, please contact:

Isla Kuhn, Eleanor Barker, or Veronica Phillips
Cambridge University Medical Library

Email : librarytraining@medschl.cam.ac.uk

Phone : (01223) 336750

Web : <http://library.medschl.cam.ac.uk>